

TI-28454

Patent Amendment

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently amended) A method of displaying image data bits, said method comprising the steps of:

receiving an image data word for an image pixel, said image data word comprised of ~~at least a first and second image data bit~~ a plurality of bits;

dividing an image frame period into at least two refresh periods, each refresh period comprising a period in which ~~at least two image data bits are displayed~~; bits of said image word are displayed in a same predetermined order for each refresh period to reduce flicker, although not all bits of the image data word are displayed in each refresh period

~~displaying said first image data bit during some, but not all, of said refresh periods; and~~

~~displaying said second image data bit during more of said refresh periods than said first image data bit.~~

2. (Currently amended) A method of allocating a frame period to image data bits, said method comprising the steps of:

dividing a frame period into at least two refresh periods, each refresh period comprising a period in which at least two image data bits are displayed;

allocating a display period to each image data bit in an m-bit image data word;

determining the a minimum temporal frequency for each of said image data bits, said minimum temporal frequency necessary to prevent each said image data bit from appearing to flicker; and

displaying each said image data bit in enough of said refresh periods to achieve said minimum temporal frequency, wherein bits of said image word are displayed in a

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same predetermined order for each refresh period to reduce flicker and not all of said image data bits are displayed in all of said refresh periods.

3. (Currently amended) A display system comprising:

a controller for receiving image data and processing said image data, said image data comprised of m image bits for each pixel of an image, said processing allocating a series of refresh periods to said image bits such that not all of said image bits are displayed in the same number of said refresh periods, each refresh period comprising a period in which at least two image bits are displayed in a same predetermined order for each refresh period to reduce flicker; and

a display device in electrical communication with said controller, said display device for providing a modulated light beam to each of an array of image pixels, said

modulation in response to said processed image data from said controller.

4. (Previously presented) The method of Claim 1, said dividing comprising dividing an image frame period into at least three refresh periods wherein a first said image data bit is displayed during at least one said refresh period, a second said image data bit is displayed during at least two said refresh periods, and a third said image data bit is displayed during at least three said refresh periods.

5. (Previously presented) The method of Claim 1, said dividing comprising dividing an image frame period into at least three refresh periods wherein a first said image data bit is displayed during at least one said refresh period, a second said image data bit is displayed during at least two said refresh periods, and a third said image data bit is displayed during at least three said refresh periods and wherein said first, second, and third image data bits are displayed during different numbers of refresh periods.

6. (Previously presented) The method of Claim 2, said dividing comprising dividing an image frame period into at least three refresh periods wherein a first said

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image data bit is displayed during at least one said refresh period, a second said image data bit is displayed during at least two said refresh periods, and a third said image data bit is displayed during at least three said refresh periods.

7. (Previously presented) The method of Claim 2, said dividing comprising dividing an image frame period into at least three refresh periods wherein a first said image data bit is displayed during at least one said refresh period, a second said image data bit is displayed during at least two said refresh periods, and a third said image data bit is displayed during at least three said refresh periods and wherein said first, second, and third image data bits are displayed during different numbers of refresh periods.

8. (Previously presented) The display of Claim 3, wherein a first said image data bit is displayed during at least one said refresh period, a second said image data bit is displayed during at least two said refresh periods, and a third said image data bit is displayed during at least three said refresh periods.

9. (Previously presented) The display of Claim 3, wherein a first said image data bit is displayed during at least one said refresh period, a second said image data bit is displayed during at least two said refresh periods, and a third said image data bit is displayed during at least three said refresh periods and wherein said first, second, and third image data bits are displayed during different numbers of refresh periods.